

Some new combinations and a new hybrid genus in Orchidaceae: *Diurideae*, for eastern Australia

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Abstract

New combinations and a new hybrid genus are created for the Orchidaceae tribe *Diurideae* in eastern Australia. The following new combinations are made in *Arachnorchis* D.L.Jones & M.A.Clem. and *Simpliglottis* Szlachetko — *Arachnorchis* \times *variabilis* (Nicholls) Jeanes, *Simpliglottis grammata* (G.W.Carr) Jeanes, *Simpliglottis jeanesii* (D.L.Jones) Jeanes and *Simpliglottis triceratops* (D.L.Jones) Jeanes. The following new hybrid genus is created followed by a new combination within that genus — \times *Chilosimpliglottis* Jeanes, \times *Chilosimpliglottis pescottiana* (R.S.Rogers) Jeanes.

Introduction

The past couple of years have seen a flurry of activity in the reclassification of parts of the primarily Australian orchid tribe *Diurideae* (Hopper & Brown 2000, 2001a, 2001b; Jones *et al.* 2001; Szlachetko 2001a, 2001b; Jones *et al.* 2002). These various works have given rise to conflicting classifications at the generic and subgeneric levels as well as the publication of many invalid names. Furthermore, the authors have overlooked several taxa and hence some of the necessary combinations have not been made into these new taxonomic systems. The opportunity is here taken to create the necessary new combinations at the generic level for those taxa occurring in eastern Australia. The creation of these new combinations will benefit flora writers, compilers of flora lists and land management authorities who often work within a legislative framework that demands validly published binomials for the taxa with which they deal.

Taxonomy

Arachnorchis \times *variabilis* (Nicholls) Jeanes, *comb. nov.*

Basionym: *Caladenia variabilis* Nicholls, *Victorian Naturalist* 66: 223, figs L & M (1950).

An apparent natural hybrid between *Arachnorchis orientalis* (G.W.Carr) D.L.Jones & M.A.Clem. and *Arachnorchis tessellata* (Fitzg.) D.L.Jones & M.A.Clem. from south-eastern Victoria. Natural hybrids of similar appearance can be derived from hybridization between other taxa (Jeanes & Backhouse 2001).

\times *Chilosimpliglottis* Jeanes, *hybrid gen. nov.*

This hybrid genus is the result of natural hybridization between the genera *Chiloglottis* R.Br. and *Simpliglottis* Szlachetko. One named taxon is currently recognised.

\times *Chilosimpliglottis pescottiana* (R.S.Rogers) Jeanes, *comb. nov.*

Basionym: *Chiloglottis pescottiana* R.S.Rogers, *Proc. Roy. Soc. Victoria* new ser. 30: 139, t.25 (1918).

This natural hybrid between *Chiloglottis trapeziformis* Fitzg. and *Simpliglottis valida* (D.L.Jones) Szlachetko occurs in New South Wales and Victoria, and has been observed at a number of sites where the ranges of the parent species overlap.

Simpliglottis grammata (G.W.Carr) Jeanes, *comb. nov.*

Basionym: *Chiloglottis grammata* G.W.Carr, *Indigenous Flora & Fauna Association Miscellaneous Paper 1*: 20 (1991).

Simpliglottis jeanesii (D.L.Jones) Jeanes, *comb. nov.*

Basionym: *Chiloglottis jeanesii* D.L.Jones, *Orchadian* 12(5): 233 (1997).

Simpliglottis triceratops (D.L.Jones) Jeanes, *comb. nov.*

Basionym: *Chiloglottis triceratops* D.L.Jones, Contributions to Tasmanian Orchidology-3: A Taxonomic Review of *Chiloglottis* R.Br. in Tasmania, *Australian Orchid Research* 3: 66 (1998).

Note: *Simpliglottis* Szlachetko differs from *Chiloglottis* in a number of important morphological characters. In *Simpliglottis* the leaves are generally broader and lack undulate margins, the scape is generally shorter (although it does elongate after anthesis) and stouter, the flower is usually larger, the petals are spreading or incurved (deflexed against the ovary in *Chiloglottis*), the labellum is extremely mobile (more or less fixed in *Chiloglottis*), elliptic, ovate or cordate in shape (rhomboid or trapezoid in *Chiloglottis*) and the lamina calli are generally fewer, less crowded and of fairly uniform appearance.

The results of recent molecular studies conducted on the group by Jones *et al.* (2002) demonstrate monophyly for *Simpliglottis* within *Chiloglottis sens. lat.* although they have chosen to recognise *Simpliglottis* at the subgeneric level only.

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